Relationships of Dissociative Disorders and Personality Traits in Opium Addicts on Methadone Treatment

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Original Article

Abstract

Background: Drug abuse is a major public health problem. Some believe that when dissociation fails to defend against emotional, physical, or sexual trauma, the person will find relief from unpleasant thoughts and emotions in opium use. On the other hand, personality disorders are considered as important predictors of treatment outcomes in drug abusers. Due to lack of adequate research in this regard, we evaluated dissociative disorders and personality traits of opium addicts on methadone treatment.

Methods: This cross-sectional analytic study included 111 non-psychotic subjects on methadone treatment (case group) and 69 non-addicts (control group). After recording demographic characteristics, Dissociative Experiences Scale (DES) and Millon Multiaxial Inventory III were applied to assess dissociative symptoms and clinical personality patterns of all participants.

Findings: Dissociative symptoms were significantly more common in the case group than in the control group ($P = 0.044$). While hysterionic personality disorder was more frequent in the control group ($P = 0.008$), sadistic, antisocial, and schizotypal personality disorders were significantly more common in the case group ($P = 0.008, 0.002$, and 0.023, respectively).

Conclusion: We found relations between history of drug dependence, dissociative symptoms, and personality disorders. Therefore, the mentioned disorders need to be kept in mind while planning addiction treatment modalities and identifying high risk groups.

Keywords: Dissociation, Personality traits, Patients, Methadone

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Introduction

Drug abuse is a major health problem in the world. Although the exact number of drug users in Iran has not been reported, previous studies have estimated a number around three million.[1] According to psychodynamics, no one becomes addicted without a reason.

Dissociation is a mental defense mechanism as a result of severe and chronic emotional, physical, and sexual trauma. It causes physical and/or emotional numbness and acts as a defense through disturbing basic behavioral components, affect, sensation, awareness, and identity. In some cases, the failure of this psychogenic mechanism leads to opium use since it can bring about the same level of relief from unpleasant emotions and thoughts. This process is called chemical dissociation.[2-4]

Personality disorders especially cluster B disorders such as antisocial, borderline, narcissistic, and hysterionic personality disorders, are considered among the most important predictors of treatment outcome in drug abusers. Paranoid, schizoid, and schizotypal personality disorders (cluster A) and avoidant, dependent, and to some extent, obsessive-compulsive personality disorders (cluster C) are also common among drug users.[5]

A study on 116 Iranian subjects indicated that female drug abusers and male non-addicts had the highest and lowest scores of Dissociative Experience Scale (DES), respectively. It also reported significant differences in DES scores and clinical symptoms [based on Symptom Cheklist-90-Revised (SCL-90-R) scores] between drug addicts and non-addicts.[6] Somer et al. showed dissociative disorders to be more common among individuals with a history of drug use compared to the control group.[7]

In the present study, we compared dissociative disorders and personality traits of drug addicts on methadone treatment with healthy controls. In the only available related study, Kianpoor et al. used SCL-90-R to evaluate drug-dependent prisoners.[6] Therefore, their findings are not generalizable. In order to assess greater proportions of the whole society, the participants of the present study were selected from the addiction treatment clinic of Shahid Beheshti Hospital (Kerman, Iran). Moreover, compared to the mentioned study, we included a larger sample size and employed a newer, more comprehensive tool (Millon Multiaxial Inventory-III).

Considering the absence of a previous study in this regard, we hope that our findings increase the awareness about the causes of opium consumption and lead to more appropriate treatment modalities such as individual and group psychotherapy that focus on characteristic analysis. We also hope that this study can determine the effects of personality disorders in opium addiction.

Methods

This cross-sectional analytic study was conducted on 111 individuals on methadone treatment (case group). The subjects were not psychotic according to the Diagnostic and Statistical Manual of Psychiatric Disorders, Fourth Edition (DSM IV). They were selected from the addiction treatment clinic of Shahid Beheshti Hospital (Kerman, Iran) which confirmed the negative results of their morphine tests during the three months prior to the study.

The control group included 69 non-addict staff members of Shahid Beheshti Hospital who were neither on methadone treatment nor using any illicit drugs. They were carefully selected to match the case group in terms of socioeconomic status and education level. Due to ethical considerations, the absence of addiction in the control group could not be ensured by morphine tests. However, their pupil size and teeth were examined and those suspected of addiction were not included.

All participants had at least finished junior high school and aged 30-50 years old. After explaining the study protocol and answering all questions, written consents were obtained from all subjects. Demographic characteristics of the two groups were then recorded in a checklist. Finally, the DES and Millon Multiaxial Inventory-III were employed to collect data.

DES is a 28-item scale scored as 0-100. Scores of 30 and above indicate the presence of dissociative disorders. All questions have 11 choices whose scores are multiples of 10 and range between 0% and 100%. DES, originally introduced by Carlson and Putnam[8] in 1993, has been widely accepted as a reliable and valid test. The Persian version of DES was standardized and

used by Kianpoor et al. in 2010.[6]

The 175-item Millon Multiaxial Inventory-III is used to identify personality disorders and other psychiatric problems such as anxiety, major depression, alcohol dependence, dysthymia, somatoform disorders, bipolar disorder, delusional disorder, post-traumatic stress disorder, thought disorder, and drug dependence. The test results were interpreted with the relevant software. The Millon Multiaxial Inventory-III is one of the most commonly used psychological tests which has been employed in several cross-cultural researches. It has been translated to several languages and its Persian version has been standardized twice.[9]

The collected data was finally analyzed using descriptive statistics and Pearson's chi-square test in SPSS for Windows 18.0 (SPSS Inc., Chicago, IL, USA).

Results

The mean ages of the case and control groups were 38.46 ± 9.92 and 32.88 ± 7.27 years old, respectively. Before methadone treatment, opium, heroin, opium sap, and methadone had been used by 55 (49.5%), 29 (26.1%), 22 (19.8%), and 4 cases (3.6%), respectively. The mean dose of methadone in the case group was 65.06 ± 40.15 mg (range: 8-150 mg).

The dissociative symptoms were significantly more frequent in the case group than the control group (P = 0.044). In fact, 36 cases (32.4%) and 6 controls (8.7%) scored higher than the cut-off point (30) on the DES (Table 1).

There were no significant differences between the two groups regarding clinical personality patterns or schizoid, depressive, avoidant, dependent, narcissistic, obsessive-compulsive, masochistic, and passive-aggressive personality disorders. However, the frequencies of other disorders were significantly different between the two groups. The hysterionic personality disorder was more common in the control group (42 people, 37.8%) compared to the case group (40 people, 58%) (P = 0.008). On the other hand, sadistic personality disorder was detected in 17 cases (15.3%) and 2 controls (2.89%) (P = 0.008). Antisocial personality disorder was also more prevalent in the case group [14 (12.6%) vs. 0, P = 0.002] (Table 2).

Among severe personality disorders, i.e. schizotypal, paranoid, and borderline personality disorders, the two groups were only different in terms of schizotypal personality disorder. More precisely, while the disorder was not observed in any of the subjects in the control group, it existed in 8 cases (7.2%) (P = 0.023).

According to Pearson's chi-square test, two personality disorders had correlation with dissociative symptoms. Depressive and passive-aggressive personality disorders had direct correlations with dissociative symptoms (P = 0.004 and 0.013, respectively). However, dissociative symptoms and methadone dosage did not have a significant relation (P = 0.309).

Table 1. Dissociative symptoms of opium addicts (case group) and non-addicts (control group) based on Dissociative Experience Scale scores

Group	Dissociative symptoms		Total	P
	High[*]	Low[†]		
Case group	36 (9.9)	75 (90.1)	111 (100)	0.044
Control group	6 (6.7)	63 (98.6)	69 (100)	

Values are expressed as n (%)   * Above the cut-off point (30)   [†] Below the cut-off point (30)

Table 2. Clinical personality patterns of opium addicts (case group) and non-addicts (control group) based on Millon Multiaxial Inventory-III

Personality disorder		Case group	Control group	P
Dramatic	Yes	42 (37.8)	40 (58.0)	0.008
	No	69 (62.2)	29 (42.0)	
Sadistic	Yes	17 (15.3)	2 (2.9)	0.008
	No	94 (84.7)	67 (97.1)	
Antisocial	Yes	14 (12.6)	0 (0.0)	0.002
	No	97 (87.4)	69 (100)	
Schizotypal	Yes	8 (7.2)	0 (0.0)	0.023
	No	103 (92.8)	69 (100)	

Values are expressed as n (%)

Discussion

We found dissociative symptoms to be significantly more common among individuals on methadone treatment than in the control group. Considering a cut-off point of 30 on the DES, 9.9% of our participants had dissociative disorders. This rate was lower than those reported by Tamar-Gurol et al. (24.3%)[1] and Tutkun et al. (10.2%).[11] Kianpoor et al. calculated the mean DES score of prisoners as 45.8 and indicated 74% of their study subjects to have scored higher than 30. However, imprisonment may justify these high rates.[6] In general, dissociative disorders seem to be more prevalent among individuals with history of addiction in Iran than in other countries. Nevertheless, further studies are required to confirm such a hypothesis. In contrast, some researchers, including Schafer et al.,[12] have rejected the relationship between dissociative disorders and drug abuse.

In the present study, hysterionic personality disorder was more frequent in the control group than in the case group. However, the frequency of sadistic, antisocial, and schizotypal personality disorders were significantly higher in the case group. Few studies have examined personality disorders and clinical syndromes in individuals with or under treatment for opioid dependence. In addition, most of the available studies have not separately assessed personality disorders. While Kianpoor et al.[6] used SCL-90-R to evaluate the relationship between clinical syndromes and dissociative disorders, we employed Millon Multiaxial Inventory-III. Other researchers such as Evren et al.[13] and Dehghani and Jazayeri[14] used Millon Multiaxial Inventory-II and confirmed the existence of clinical personality patterns in individuals under treatment for addiction. Utilizing the same tool, a study in Malaysia reported personality disorders in 45.3% of opium addicts and 25.3% of non-addicts.[5]

The relationships between dissociation and personality disorders were investigated in the present study for the first time. We found depressive and passive-aggressive personality disorders to have significant positive relations with dissociation.

Overall, according to our findings, dissociative symptoms and some personality disorders are more common in drug addicts on methadone treatment than in the general population. Since these disorders can affect patients' commitment to the treatment and the process of treatment, they should be kept in mind while planning addiction therapy. Moreover, the results of this study and similar research can be used to identify high risk groups and manage special modalities for them.

The psychometric tests in this study assessed the most private aspects of a person's life. Although the subjects were reassured about the confidentiality of information, they might have been afraid to provide us with correct answers. Further studies with larger sample size can minimize the possibility of such errors. Another limitation of this study was using DES and TEC (Traumatic Experiences Checklist) which required the individuals to determine the percentage or intensity of their problems. The participants, however, could have been wrong in estimating accurate values.

Conflict of Interest

The Authors have no conflict of interest.

Acknowledgements

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تجزیه روانی در مددجویان تحت درمان با متادون و ارتباط آن با خصوصیات شخصیتی آن‌ها

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مقاله پژوهشی

چکیده

مقدمه: مصرف مواد یکی از مهم‌ترین مشکلات حوزه سلامت می‌باشد. در این بین، برخی عقیده دارند زمانی که مکانسیم تجزیه روانی در مقابل آسیب‌های هیجانی، فیزیکی و جنسی قادر به دفاع نیست، فرد با مصرف اپیوم به همان سطح از تسکین (Relief) افکار و عواطف ناخوشایند دست می‌یابد. همچنین گفته شده است، اختلال شخصیت به عنوان یکی از مهم‌ترین پیشگویی کننده‌های پیامد درمان در بیماران با مصرف مواد می‌باشد. از آن جا که مطالعات انجام شده در این زمینه بسیار محدود است، در مطالعه حاضر اختلالات تجزیه‌ای و خصوصیات شخصیتی در مددجویان تحت درمان با متادون مورد بررسی قرار گرفت.

روش‌ها: مطالعه حاضر به صورت مقطعی و تحلیلی بر روی ۱۱۱ نفر از مددجویان تحت درمان با متادون و غیر روان‌پریش (گروه بیمار) و ۶۹ نفر از افراد معمول جامعه و غیر وابسته به مصرف اپیوم (گروه شاهد) انجام شد. پس از ثبت مشخصات دموگرافیک، آزمون DES (Dissociative experiences scale) و Millon-III (Millon™ clinical multiaxial inventory یا MCMI) در همه افراد برای بررسی خصوصیات تجزیه‌ای و الگوهای شخصیت بالینی انجام شد.

یافته‌ها: خصوصیات تجزیه‌ای در افراد مددجو به طور معنی‌داری بیش از گروه شاهد بود ($P = 0/044$). الگوی نمایشی در گروه شاهد بیش از گروه بیمار وجود داشت ($P = 0/008$). دیگر اختلالات شامل دیگرآزاری ($P = 0/008$)، شخصیت ضد اجتماعی ($P = 0/002$) و اختلال اسکیزوتایپال ($P = 0/023$) در گروه بیمار به طور معنی‌داری بیش از گروه شاهد دیده شد.

نتیجه‌گیری: نتایج این مطالعه بین سابقه وابستگی به مواد مخدر، تجزیه روانی و اختلالات شخصیتی ارتباط نشان داد. به نظر می‌رسد، جهت برنامه‌ریزی برای درمان وابستگی به مواد و شناسایی گروه‌های در معرض خطر باید به این اختلالات همزمان توجه کرد.

واژگان کلیدی: تجزیه روانی، خصوصیات شخصیتی، مددجو، متادون

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